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=> s papillary fibroblast

L1	7	FILE CAPLUS
L2	9	FILE MEDLINE
L3	10	FILE EMBASE
L4	12	FILE BIOSIS

TOTAL FOR ALL FILES

L5	38	PAPILLARY FIBROBLAST

=> l5 and proteoglycan

L6	1	FILE CAPLUS
L7	1	FILE MEDLINE
L8	1	FILE EMBASE
L9	1	FILE BIOSIS

TOTAL FOR ALL FILES

L10	4	L5 AND PROTEOGLYCAN

=> dup rem
ENTER L# LIST OR (END):l10
PROCESSING COMPLETED FOR L10

L11	2	DUP REM L10 (2 DUPLICATES REMOVED)

=> d l11 ibib abs total

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
ACCESSION NUMBER: 1993:165820 CAPLUS
DOCUMENT NUMBER: 118:165820

TITLE: Differences in decorin expression by papillary and reticular fibroblasts in vivo and in vitro
AUTHOR(S): Schoenherr, Elke; Beavan, Lesley A.; Hausser, Heinz; Kresse, Hans; Culp, Lloyd A.
CORPORATE SOURCE: Inst. Physiol. Chem. Pathobiochem., Univ. Muenster, Muenster, 4400, Germany
SOURCE: Biochemical Journal (1993), 290(3), 893-9
CODEN: BIJOAK; ISSN: 0306-3275
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Immunostaining of adult human skin shows that the small dermatan sulfate **proteoglycan** decorin is abundant in the whole dermal layer but absent from the epidermis. In the papillary layer adjacent to the dermal-epidermal border, more decorin was detected than in the reticular layer of the dermis. Expression of decorin mRNA by cells in the papillary dermis could also be shown by in situ hybridization. In contrast, biglycan, another small chondroitin sulfate/dermatan sulfate **proteoglycan**, is found only at the dermal-epidermal border. Therefore the biosynthesis of these 2 **proteoglycans** by papillary and reticular fibroblasts from 2 different donors was compared in tissue culture. **Papillary fibroblasts** secrete up to 5.9-fold more decorin than reticular fibroblasts, while the amts. of cell-assocd. decorin in both cell types are similar. By Northern blot anal. as well as by in situ hybridization it was shown that **papillary fibroblasts** contain more mRNA coding for decorin than do reticular cells. In addn., no mosaic pattern of decorin expression was found in the cultured cells. The expression and synthesis of biglycan compared with decorin was .apprx.10-fold lower and did not show any significant differences for the 2 cell types. The kinetics of secretion and the rate of endocytosis of decorin were similar for both types of fibroblasts. These results were found with fibroblasts between the 9th and 15th passage from a newborn subject as well as from a 78-yr-old donor, indicating that the pattern of decorin synthesis is not age-dependent in the range investigated. Also, fibroblasts from different layers of the dermis have a specific pattern of synthesis of small chondroitin sulfate/dermatan sulfate **proteoglycans**, and they also maintain these patterns in cell culture.

L11 ANSWER 2 OF 2 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 93207545 MEDLINE
DOCUMENT NUMBER: 93207545 PubMed ID: 8457216
TITLE: Differences in decorin expression by papillary and reticular fibroblasts in vivo and in vitro.
AUTHOR: Schonherr E; Beavan L A; Hausser H; Kresse H; Culp L A
CORPORATE SOURCE: Institute of Physiological Chemistry and Pathobiochemistry, University of Munster, Federal Republic of Germany.
CONTRACT NUMBER: AG 10213 (NIA)
SOURCE: BIOCHEMICAL JOURNAL, (1993 Mar 15) 290 (Pt 3) 893-9.
Journal code: 2984726R. ISSN: 0264-6021.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199304
ENTRY DATE: Entered STN: 19930507
Last Updated on STN: 19970203
Entered Medline: 19930421

AB Immunostaining of adult human skin shows that the small dermatan sulphate **proteoglycan** decorin is abundant in the whole dermal layer but absent from the epidermis. In the papillary layer adjacent to the dermal-epidermal border, more decorin was detected than in the reticular layer of the dermis. Expression of decorin mRNA by cells in the papillary dermis could also be shown by in situ hybridization. In contrast, biglycan, another small chondroitin sulphate/dermatan sulphate

proteoglycan, is found only at the dermal-epidermal border. Therefore the biosynthesis of these two **proteoglycans** by papillary and reticular fibroblasts from two different donors was compared in tissue culture. **Papillary fibroblasts** secrete up to 5.9 times more decorin than reticular fibroblasts, while the amounts of cell-associated decorin in both cell types are similar. By Northern blot analysis as well as by in situ hybridization it was shown that **papillary fibroblasts** contain more mRNA coding for decorin than do reticular cells. In addition, no mosaic pattern of decorin expression was found in the cultured cells. The expression and synthesis of biglycan compared with decorin was about 10 times lower and did not show any significant differences for the two cells types. The kinetics of secretion and the rate of endocytosis of decorin were similar for both types of fibroblasts. These results were found with fibroblasts between the 9th and 15th passage from a newborn subject as well as from a 78-year-old donor, indicating that the pattern of decorin synthesis is not age-dependent in the range investigated. These results further show that fibroblasts from different layers of the dermis have a specific pattern of synthesis of small chondroitin sulphate/dermatan sulphate **proteoglycans**, and they also maintain these patterns in cell culture.

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=> s l5 and glycosaminoglycan
L12           0 FILE CAPLUS
L13           0 FILE MEDLINE
L14           0 FILE EMBASE
L15           0 FILE BIOSIS

TOTAL FOR ALL FILES
L16           0 L5 AND GLYCOSAMINOGLYCAN

=> s l5 and antibody
L17           4 FILE CAPLUS
L18           3 FILE MEDLINE
L19           4 FILE EMBASE
L20           3 FILE BIOSIS

TOTAL FOR ALL FILES
L21          14 L5 AND ANTIBODY

=> dup rem
ENTER L# LIST OR (END):l21
PROCESSING COMPLETED FOR L21
L22           5 DUP REM L21 (9 DUPLICATES REMOVED)

=> s l22 and glycosaminoglycan
L23           4 S L22
L24           0 FILE CAPLUS
L25           0 S L22
L26           0 FILE MEDLINE
L27           1 S L22
L28           0 FILE EMBASE
L29           0 S L22
L30           0 FILE BIOSIS

TOTAL FOR ALL FILES
L31           0 L22 AND GLYCOSAMINOGLYCAN

=> d l22 ibib abs total

L22  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2001:514014  CAPLUS
DOCUMENT NUMBER:          135:75744
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TITLE: Use of an **antibody** specific to **papillary fibroblasts** as a marker of skin quality
INVENTOR(S): Asselineau, Daniel; Caplan, Arnold
PATENT ASSIGNEE(S): L'oreal, Fr.
SOURCE: Fr. Demande, 12 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2801979	A1	20010608	FR 1999-15292	19991203
FR 2801979	B1	20020208		
US 2001036642	A1	20011101	US 2000-725269	20001129
EP 1111389	A1	20010627	EP 2000-403310	20001204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001215225	A2	20010810	JP 2000-368860	20001204

PRIORITY APPLN. INFO.: FR 1999-15292 A 19991203
AB The invention discloses the use of at least one **antibody** specific for **papillary fibroblasts** as marker(s) for the quality of skin or a skin equiv.

L22 ANSWER 2 OF 5 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998376469 EMBASE
TITLE: Effects of topical creams containing vitamin C, a copper-binding peptide cream and melatonin compared with tretinoin on the ultrastructure of normal skin.
AUTHOR: Abdulghani A.A.; Sherr A.; Shirin S.; Solodkina G.; Morales Tapia E.; Wolf B.; Gottlieb A.B.
CORPORATE SOURCE: Dr. A.B. Gottlieb, Clinical Research Center, UMDNJ-Robert Wood Johnson Med. Sch., One Robert Wood Johnson Place, New Brunswick, NJ 08903, United States
SOURCE: Disease Management and Clinical Outcomes, (1998) 1/4 (136-141).
Refs: 46
ISSN: 1088-3371 CODEN: DMCOF6
PUBLISHER IDENT.: S 1088-3371(98)00011-4
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Little is known of the effects of topical application of vitamin C, glycyl-L-histidyl-L-lysine copper tri-peptide complex or melatonin as compared with topical tretinoin on the ultrastructure of skin. We were interested in determining whether any of these topical applications could enhance the repair process associated with photodamage of skin. In healthy subjects, dermal procollagen synthesis was studied after topical application of the study medications. Further investigations were done to determine possible changes in keratinocyte proliferation, keratinocyte differentiation, and cutaneous inflammation after topical application. Twenty healthy subjects were included for a period of 1 month in this study. Ten volunteers applied topical creams containing tretinoin and vitamin C to the extensor surface of their right and left thighs respectively. Ten others applied topical creams containing melatonin and the copper-binding cream to the extensor surface of their right and left thighs, respectively. Immunohistological assessment of the skin biopsies was made at baseline and after 1 month of treatment for changes in dermal

procollagen synthesis, the number of Ki 67+ keratinocytes (epidermal proliferation), K-16 keratin expression (epidermal differentiation), and the number of dermal CD3+ cells (T lymphocytes). Immunohistologic assessment demonstrated a significant increase of procollagen synthesis by dermal **papillary fibroblasts** from baseline in 4 of 10 volunteers treated with tretinoin, 5 of 10 treated with vitamin C, 5 of 10 treated with melatonin and 7 of 10 healthy volunteers treated with the copper-binding peptide cream. Further studies in selected individuals with good dermal collagen synthesis indicated that tretinoin enhanced epidermal proliferation. A decrease in dermal CD3+ T cells with tretinoin and vitamin C application suggested that these compounds might have anti-inflammatory properties. We concluded that topical application of tretinoin, vitamin C, melatonin, and copper-binding peptide-containing creams enhanced dermal collagen synthesis, although not in all individuals. These results also open a possible application of these compounds in the repair process of cutaneous photodamage and as anti-inflammatory agents.

L22 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
ACCESSION NUMBER: 1991:576023 CAPLUS
DOCUMENT NUMBER: 115:176023
TITLE: Fibroblasts of rabbit kidney in culture. II. Paracrine stimulation of **papillary fibroblasts** by PDGF
AUTHOR(S): Knecht, Aaron; Fine, Leon G.; Kleinman, Kenneth S.; Rodemann, H. Peter; Mueller, Gerhard A.; Woo, David D. L.; Norman, Jill T.
CORPORATE SOURCE: Sch. Med., Univ. California, Los Angeles, CA, 90024, USA
SOURCE: American Journal of Physiology (1991), 261(2, Pt. 2), F292-F299
CODEN: AJPHAP; ISSN: 0002-9513
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To examine the role of tubulointerstitial cell interaction in the regulation of fibroblast growth, fibroblasts from the rabbit renal cortex (CF) and papilla (PF) were cocultured with epithelial cells from the same tissue location. Inner medullary collecting duct epithelial cells (IMCDE) or IMCDE-conditioned medium stimulated DNA synthesis in PF, whereas proximal tubule epithelium (PTE) had no effect on the proliferation of CF. PF and CF showed a similar mitogenic response to exogenous EGF and insulin-like growth factor 1 (IGF-I). Transforming growth factor-.beta.1 inhibited growth of both cell types, and basic fibroblast growth factor (bFGF) had no effect on proliferation of either cell type. In contrast, platelet-derived growth factor (PDGF) was a potent mitogen for PF but was only weakly mitogenic for CF. Both CF and PF expressed a similar no. of a single-affinity class of PDGF receptors (Kd, 2-4 .times. 10-10M). Assay for growth factor activity in conditioned medium from IMCDE and PTE showed that only IMCDE produced detectable PDGF. IMCDE-stimulated proliferation of PF was partially blocked by an **antibody** to PDGF, whereas **antibodies** to IGF-I had no neutralizing effect. The data suggest a role for PDGF in the regulation of interstitial fibroblast proliferation by IMCDE in the renal papilla. This paracrine system may be important in the pathogenesis of some forms of interstitial fibrosis of the kidney.

L22 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
ACCESSION NUMBER: 1991:555647 CAPLUS
DOCUMENT NUMBER: 115:155647
TITLE: Fibroblasts of rabbit kidney in culture. I. Characterization and identification of cell-specific markers
AUTHOR(S): Rodemann, H. Peter; Mueller, Gerhard A.; Knecht, Aaron; Norman, Jill T.; Fine, Leon G.
CORPORATE SOURCE: Dev. Biol. Units W7-128, Univ. Bielefeld, Bielefeld,

D-4800, Germany
SOURCE: American Journal of Physiology (1991), 261(2, Pt. 2), F283-F291
CODEN: AJPHAP; ISSN: 0002-9513
DOCUMENT TYPE: Journal
LANGUAGE: English
AB There is currently no information available as to whether different renal fibroblast subpopulations can be identified and whether they show differences in functional properties. Therefore, the growth characteristics were compared of interstitial fibroblasts derived from the rabbit renal cortex and inner medulla (papilla), and cell-specific markers for the two populations of cells were sought. Analyses of the population dynamics revealed that the mitotic lifespan of **papillary fibroblasts** (PF) is .apprx.50% longer than that of cortical fibroblasts (CF), with the former going through 20 cumulative population doublings (CPD) before transition into terminally differentiated postmitotic cells compared with 9 CPD in CF. PF and CF populations contained three types of mitotically active cells (MFI, MFII, MFIII) and three types of postmitotic cells (PMFIV, PMFV, PMFVI) differentiating along a terminal cell lineage from MFI through PMFVI. In both PF and CF cultures the percent of MF-type cells decreased and the percent of postmitotic cells increased with successive doublings. Two-dimensional polyacrylamide gel electrophoresis of uniform clonal populations of MFIII-type cells revealed two specific proteins for PF-MFIII-type cells, pf1 and pf2, and three specific proteins for CF-MFIII-type cells, cf1, cf2, and cf3. Addnl., a monoclonal **antibody** was raised that does not recognize CF in culture, but reacts strongly with PF. These studies demonstrate that rabbit renal PF have a pattern of growth in vitro that is distinct from that of CF and that they can be pos. identified by specific immunol. and protein markers in vitro.

L22 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
ACCESSION NUMBER: 1989:475430 CAPLUS
DOCUMENT NUMBER: 111:75430
TITLE: The interaction of human papillary and reticular fibroblasts and human keratinocytes in the contraction of three-dimensional floating collagen lattices
AUTHOR(S): Schafer, Irwin A.; Shapiro, Allan; Kovach, Maureen; Lang, Cindy; Fratianne, Richard B.
CORPORATE SOURCE: Case West. Reserve Univ., Cleveland Met. Gen. Hosp., Cleveland, OH, 44109, USA
SOURCE: Experimental Cell Research (1989), 183(1), 112-25
CODEN: ECREAL; ISSN: 0014-4827
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fibroblasts derived from the papillary and reticular dermis of human skin and human keratinocytes show differences in their abilities to contract floating 3-dimensional gels constructed from type I collagen. Reticular fibroblasts produce greater gel contraction than **papillary fibroblasts**. When equal nos. of papillary and reticular fibroblasts are mixed in the gels, **papillary fibroblasts** consistently inhibit gel contraction by reticular fibroblasts, indicating interaction between these cell types in the contraction process. Surprisingly, keratinocytes alone produce greater gel contraction than that produced by either fibroblast type. Cooperativity in the gel contraction process is obsd. when fibroblasts are incorporated into the collagen matrix and keratinocytes are seeded onto the gel surface. Keratinocytes and dermal fibroblasts adhere to the collagen fibril to induce gel contraction by different mechanisms. Fibroblast contraction of collagen gels does not require fibronectin but is a serum-dependent reaction. In contrast, keratinocyte contraction of collagen gels occurs in a serum-free environment. Polyclonal, affinity-purified **antibodies** to human plasma fibronectin at high concns. do not inhibit gel contraction by keratinocytes, making unlikely the possibility

that fibronectin synthesized by the keratinocyte is a significant factor in the gel contraction process. Possibly, either keratinocytes are synthesizing other adhesion proteins or receptors on the cell surface can interact directly with the collagen fiber.